BRUHAT BANGALORE MAHANAGARA PALIKE, YELAHANKA ZONE

Executive Engineeer
Byatarayanapura Division
B.B.M.P., Bangalore - 92

MODIFIED SCHEDULE-B

Issued to :

Original / Duplicate

Name of the Work : Modified Estimate for Construction of Senior Citizen Building near Hopcoms at Vidyaranyapura in Ward No. 09, Vidyaranyapura Sub Division. (Phase - 2).

Sl. No.	Quantity.	Description	Unit	Rates	
				In Figures	In Words
1		Earth work in surface excavation in **Ordinary soil** for levelling and lowering the ground manually (other than foundation of buildings, culverts, road, drains and trenches of pipes lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m excavated surface levelled and neatly dressed earth to be levelled after breaking of clods and neatly dressed etc complete as per specifications and directions of engineer in charge of the work.	Cum		
2		Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5m. In depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. after breaking of clods etc complete as per specifications and directions of engineer in charge of the work.	Cum		
3		Providing and laying in position plain cement concrete of **mix M7.5 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing etc complete as per specifications and directions of engineer in charge of the work.	Cum		
4		Providing and constructing granite / trap / basalt size stone masonry in **foundation with cement mortar 1:6**, stone hammered dressed in courses not less than 20 cms high, bond stones, at two m. apart in each course including cost of materials, labour, curing etc complete as per specifications and directions of engineer in charge of the work.	Cum		
5		Providing and constructing granite / trap / basalt size stone masonry in **basement** with **cement mortar 1:6**, edges of stone chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing etc complete as per specifications and directions of engineer in charge of the work.	Cum		
6		Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour etc complete as per specifications and directions of engineer in charge of the work.	Cum		
7		Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing etc complete as per specifications and directions of engineer in charge of the work.	Sqm		

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8		Providing and constructing burnt brick masonry with approved quality of modular bricks of standard size of **class designation 50 (table moulded) with cement mortar 1:6 for basement and superstructure** including cost of materials, labour charges, scaffolding, curing etc complete as per specifications and directions of engineer in charge of the work.	Cum		
9	**33.50**	Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459 cum wuth superplastisier @ 3lts confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works **in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, wall** (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing etc complete as per specifications and directions of engineer in charge of the work.	Cum	5809.32	
	11.76			6247.63	
10	**8.10**	Providing and laying in position reinforced cement concrete ofmix M20 with OPC cement @ 24kgs, with 12 mm and down size graded granite metal coarse aggregates @ 0.5175 cum and fine aggregates @ 0.345 cum with superplastisiser @ 0.225lts,machine mixed, well compacted for plain chajja of 7.5 cms. average thickness, upto ground floor lever, including cost of all materials, labour, HOM of machinery, curing, etc complete as per specifications and directions of engineer in charge of the work.	Sqm	426.08	
11	**41.95**	Providing **TMT steel reinforcement for R.C.C** work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery TMT Bars Fe 550 etc complete as per specifications and directions of engineer in charge of the work.	Qntl	7747.24	
	14.66			8215.59	
12		Providing and laying integral cement based waterproofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc, consisting of following application. (a) Applying and grouting a slurry coat of neat cement using 2.75kg/sqm conforming admixed with proprietary water proofing compound conforming to IS:2645 over the RCC slab after cleaning the surface before treatment, (b) laying cement concrete using broken brick bats 25mm to 100mm size with 50% of cement mortar 1:5 admixed with proprietary water proofing compound conforming IS:2645 over 20mm thick layer of cement layer of cement mortar 1:5 admixed with proprietary water proofing compound to required slope and treating similarly the adjoining walls upto 300mm height including rounding off junction of walls and slabs, (c) after two days of proper curing, applying a second coat of cement lurry admixed with proprietary water proofing compound (d) Finishing the surface with 20mm thick jointless cement mortar of mixand	Sqm		
13		Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing etc complete as per specifications and directions of engineer in charge of the work.	Sqm		

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14		Providing 20mm thick cement plaster in single coat with cement mortar 1:4, to stone masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
15		Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
16		Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, providing and removing scaffolding, including cost of materials, labour, curing etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
17		Providing and laying in position plain cement concrete of **mix M7.5 with OPC cement @ 180 kgs with 40mm** and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregares @ 0.57 cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing etc complete as per specifications and directions of engineer in charge of the work.	Cum		
18		Flooring with **25mm to 40mm thick polished Thandur blue stone slabs** using cement mortar 1:6, 25mm thick over existing cement concrete bed or top roof laid to line and level and jointed with cement slurry mixed with pigment to match the shade of the slab, including cost of materials, labour, curing, polishing etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
19		Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, **roofs**, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
20	**7.43**	Providing and removing centering, shuttering, strutting, propping etc., for **chajjas**, corbels etc., including edges including cost of all materials, labour etc complete as per specifications and directions of engineer in charge of the work.	Sqm	254.76	
21	**104.11**	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of **columns** for mass concrete including cost of all materials, labour etc complete as per specifications and directions of engineer in charge of the work.	Sqm	231.39	
	63.91			243.63	
22		Supply and fixing pressed steel door frames size 125x65 mm manufacture from 1.25mm thick carbon steel or imported steel strips with mitred joints of 900 for door openings and sutters made out of seasoned honne wood, styles of 30mm, thick with lock rail of 160mm, width, top and side rails of 100mm, width width and bottom rails of 250 mm width and panel filling with 12mm thick particle board of exterior grade bonded with phenol formal dehide resin and the shutter shall be not proof, vermin proof, heat resistant guaranteed against shrinkage, warpage and such other defects for a period of 3 years, this shall be as per approved drawings, specification and direction including cost of conveyance, manufacturing, painting wit enamel paint 2 coats over primer coat, cost of labour for all items of work, machinery, equipment and all other incidental charges with all lead, lift, loading and unloading etc, complete the hollow portion of the frame to be filled with cement concrete1:2:4. etc complete as per specifications anng specification and direction including cost o	Sqm		

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23		"Supplying and fixing pressed steel window frame of size 100x50mm manufacture from 1.25 mm thick carbon steel or imported steel strips with neat mitred joints at 900degree for window openings and shall be suitable to fix M.S grills as per design and drawings using 12mm dia roads at 100mm centre to centre horizontally and two members of M.S flats of 6mmx40mm size at 150mm apart, welded into a frame of 6mmx40mm size M.S flats with 16mm size lugs, and 8nos, of 100mm size hinger, 4nos of	Sqm		
24		Providing and applying two coats with oil bound washable distemper of approved brand and shade on wall surface including priming coat with distemper primer after thoroughly brooming the surface free from mortar drops and other foregin matter including preparing the surface even and sand paper smooth, cost of materials, labours, etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
25		Providing and finishing external walls in tow coats with water proof cement paint of approve brand and shade to give an even shade after thourghly brooming the surface to remove all dirt and losse powdered material, free from mortar dops and other foreign matter cost of materials, labours, etc complete as per specifications and directions of engineer in charge of the work. **with Primer**	Cum		
26		Providing and fixing white vitreous china clay, flat back wash basin of size 630x450mm with pair of 15mm C.P brass pillar taps with C.I./M.S. brackets, 32mm C.P. brass waste of standard pattern, painting of fitting and brackets ,cutting and making good the wall and floor wherever required, including cost of materials, labour etc complete as per specifications and directions of engineer in charge of the work.	Unit		
27		Providing and fixing to wall, ceiling and floor, low density poluethylene pipes kgs/sq.cm working pressure **32mm** outside diameter, compression type fittings, wall clips, making good the wall ceiling and floor cost of materials, labour charges HOM of equipments and testing exeluding cost of fittings, etc complete as per specifications and directions of engineer in charge of the work.	Rmtr		
28		Providing and fixing in position brass bib cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads etc complete as per specifications and directions of engineer in charge of the work.	Each		
29		Providing colour glazed tiles of size 10mm thick for flooring, treads of steps and landing, laid on a bed of 12mm thick, cement mortar 1:3 mix, flush pointing using white cement with matching colour pigment, including cost of materials, labour, etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
30		Providing skirting, dado, rises of steps with Colour glazed tiles 15x15cms 6mm thick on 10mm thick cement plaster 1:3 and jointed with white cement slurry over rough plaster surface (excluding cost of rough plastered surface white should be measured and paid separately) using glazed tiles of approved make and size of materials, labour, etc complete as per specifications and directions of engineer in charge of the work.	Sqm		
31		Providing and fixing in wall surface 4 kg/sq.cm H.D.P.E. rain down water pipes 90 mm outer dia approved make and brand with necessary specials like shoes bends and offsets fixed with iron clamps, walls plugs, screws, including cost of materials, labour, etc complete as per specifications and directions of engineer in charge of the work.	m		

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32		**Groove Cutting :** Supplying ... dia 2mm/2.5mm thick heavy gauage PVC Conduit Pipe with bends metal junction boxes adhesive paste etc., and bracing U or J hooks and cement plastering up to the surface of the brick level and run with 18 SWG GI fish wire run through out the conduit wherever necessary 32 mm dia 2.5mm thick etc complete as per specifications and directions of engineer in charge of the work.	Mtrs		
33		Supplying and flush mounting teak wooden box with out front plank made of not less than 12mm thick wood after due groove cutting necessary masonry patch work 10"X7"X3" (300X228X76mm) etc complete as per specifications and directions of engineer in charge of the work.	Each		
34		8"X6"X3" (300X228X76mm)			
35		Supplying and fixing PVC/metal conduit accessories special type Junction Box 32 mm Junction Box etc complete as per specifications and directions of engineer in charge of the work.	Each		
36		Deep 32 mm Junction Box			
37		Fan Box 18 /SWG			
38		Point Wiring using copper wire with switch Supplying and wiring adopting loop system in existing PVC Conduit / casing caping using Copper PVC insulated multi strand 2x1.5 Sqmm copper wire with a 6 Amps flush type SP control switch shall be fixed on the existing plastic sheet gang box the other end of the wires shall be terminated with sufficient loose length in a wood PVC round block complete for each outlet KPWD SR 2010-11 (P.3/I.8) Point Wiring using Class A Materials a) Short point upto 3Mtr from tapping point to out let via switch etc complete as per specifications and directions of engineer in charge of the work.	Each		
39		b) Medium point above 3mtr upto 6mtr from tapping point to out let via switch			
40		C) Long point above 6mtrs upto 10mtrs from tapping point to outlet via switch			
41		Supplying and fixing superior quality modula switch mounting polyorbonate plate with ncecessary supporting back plate with required nos. of machines screwes, bolts nuts etc., complete on the existing metal/PVC box 1 to 3 Modular etc complete as per specifications and directions of engineer in charge of the work.	Each		
42		8 Modular			
43		Supplying and fixing of modular switch / socket/Stepped electrical fan regulator / dimmer / telephone socket etc on existing modular switch plat 6Amps one way. etc complete as per specifications and directions of engineer in charge of the work.	Each		
44		6Amps 3way Socket.			
45		Stepped Fan Regulator			
46		Supply patty type fluorescent tube light fitting of 4' - 36/40 watts fluorescent tube fitting, made out of M.S. Sheet and stove enameled with low loss open construction copper wound ferromagnetic ballast, starter, locking, locking type brass contact holder mounted on double fold type sheet base fully wired for used on 230 Volts A C Supply including fluouresecent tube Group 'A' etc complete as per specifications and directions of engineer in charge of the work.			
47		Supplying of Incandescent lamps C75B.C. 100Watts			
48		Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system KPWD SR 2010-11 (P-23, I-23) Regulator Model (Khaitan, Crompton Geaves, Orient, Polar, Bajaj, Usha, Havells, Almonard 56" Sweep (1400 mm)	Each		

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49		Supplying and fixing 32Amps security and energy savings DP switch with key tag suitable to operate on 230 Volts 50Hz AC supply & completely wired on existing box KPWD SR 2010-11 (P.9/I.19) Group A	Each		
50		Supplying an fixing one of 230 volts PBBC bakelite staight or slant batten holder and wiring with in 60w/230 Volts lamps KPWD SR 2010-11 (P-13, I.2)	No		
51		Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and wiring complete as required 5-32 Amps SP KPWD SR 2010-11 (P.34/I.13)	Each		
52		Supply and fixing polished wood board made of not less than 15mm thick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc KPWD SR 2010-11 (P,32/I.2) 20"x20"x2.5"			
53		Supplying and fixing of porcelain fuse channel with cut out on existing wooden /panel using necessary nuts, bolts and washers etc complete KPWD SR 2010-11 (P.30/I.3) 32 Amps etc complete as per specifications and directions of engineer in charge of the work.			
54		Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipment on the meter board using 40mm dia 2.90 thick GI pipe 2.5 mtr long buried in a pit.. The pit should be filled with equal proprotion of salt and charcol 150mm alround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as oer ISI specification 7.3.3 of Is 732 using 12mm dia nuts, washers and checknuts etc the pipe shall have 16 through holes of 122 mm dia etc complete as per specifications and directions of engineer in charge of the work.	No		
55		INSULATED CABLE ON MESSENGER WIRE Using 2 single core wires for a single phas and 4 single core wies for 3 phase supplying and stringing PVC insulated and PVC sheathed 650/1100V class aluminium conductor of size supported by 3.15mm (10 SWG) GI messenger wire with two breaks insulators, one at each end of the span wit suspenders at intervals of 0.75m. Each suspender shall be of porcelain reel insulator of suitable core through which insulated wire passes (single core or twin core as the case may be) and this reel insulator shall be fixed to the messanger wire using 2mm (No. 14SWG) GI wire suitably bent and twisted. Separate reel insulated shall be provided for each wire the messanger wire shall be bed-ended on the clamp provided to the departmental pole wide item No. 4 above c) 6 Sqmm etc complete as per specifications and directions of engineer in charge of the work.	Mtr		
		EIRL			
56	171.37	IProviding and constructing precast concrete solid blocks with compressive strength not les than 35 Kg/sqm with cement mortar 1:4 masonry (quoin, Jamb, closer blocks) with solid concrete blocks of size 40x20x20 cms conforming to I.S: 2185/1965 in superstructure including cost of materials, labour charges, scaffolding, curing complete as per specifications etc complete as per specifications and directions of engineer in charge of the work.	Mtr	1023.47	

Signture of the Contractor

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